

## CLAIMS:

*Surfactant*  
1. A method of diagnosing lung damage in a mammal, said method comprising screening for the modulation of pulmonary surfactant levels in the body fluid of said mammal.

*Sub B*  
2. A method according to claim 1, wherein said modulation is an increase.

*Sub C*  
3. A method according to claim 2, wherein said lung damage is early stage lung damage.

*Sub D*  
4. A method according to claim 3, wherein said early stage lung damage is alveolo-capillary membrane damage.

*a* 5. A method according to <sup>claim 1</sup> ~~any one of claims 1 to 4~~, wherein said pulmonary surfactant is any one or more of SP-A, SP-B, SP-C or SP-D.

6. A method according to claim 5, wherein said pulmonary surfactant is SP-B.

*a* 7. A method according to <sup>claim 1</sup> ~~any one of claims 1 to 6~~, wherein said body fluid is blood.

8. A method of monitoring for changes in the extent of lung damage in a mammal, said method comprising screening for the modulation of pulmonary surfactant levels in the body fluid of said mammal.

9. A method according to claim 8, wherein said lung damage is alveolo-capillary membrane damage.

10. A method according to claim 8 or 9, wherein said pulmonary surfactant is any one or more of SP-A, SP-B, SP-C or SP-D.

11. A method according to claim 10, wherein said pulmonary surfactant is SP-B.

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*Sub B*

*Multidependent*

12. A method according to any one of claims 8 to 11, wherein said body fluid is blood.
13. A method of diagnosing lung damage in a mammal, said method comprising screening for the modulation of pulmonary surfactant level ratios in the body fluid of said mammal.
14. A method according to claim 13 wherein said pulmonary surfactant level ratio is the SP-B:SP-A ratio.
15. A method according to claim 14 wherein said modulation is an increase.
16. A method according to claim 15 wherein said lung damage is alveolo-capillary membrane damage.
17. A method according to claim 16 wherein said alveolo-capillary membrane damage is early stage alveolo-capillary membrane damage.
18. A method according to any one of claims 13 to 17 wherein said body fluid is blood.
19. A method of monitoring for changes in the extent of lung damage in a mammal, said method comprising screening for the modulations of pulmonary surfactant level ratios in the body fluid of said mammal.
20. A method according to claim 19 wherein said pulmonary surfactant level ratio is the SP-B:SP-A ratio.
21. A method according to claim 19 or 20 wherein said body fluid is blood.

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- 22. A method of determining, in a mammal exposed to a lung injury factor, a predisposition to developing severe lung damage, said method comprising screening for the modulation of pulmonary surfactant levels in the body fluid of said mammal wherein the level of said pulmonary surfactant is indicative of a predisposition to developing severe lung damage.
- 23. A method according to claim 22, wherein said modulation is an increase.
- 24. A method according to claim 23, wherein said mammal has developed acute lung injury due to exposure to a lung injury factor and said severe lung damage is acute respiratory distress syndrome.
- 25. A method according to any one of claims 22 to 24, wherein said pulmonary surfactant is SP-A, SP-B, SP-C or SP-D.
- 26. A method according to claim 25, wherein said pulmonary surfactant is SP-B.
- 27. A method according to any one of claims 22 to 26, wherein said body fluid is blood.
- 28. A method of determining, in a mammal exposed to a lung injury factor, a predisposition to developing severe lung damage said method comprising screening for the modulation of pulmonary surfactant level ratios in the body fluid of said mammal wherein said ratios are indicative of a predisposition to developing severe lung damage.
- 29. A method according to claim 28 wherein said body fluid is blood.

*Sub  
By*

- 30. A method of determining, in a mammal exposed to a lung injury factor, a predisposition to developing severe lung damage, said method comprising correlating the modulation of pulmonary surfactant levels in the body fluid of said mammal with the measurement result of another lung clinical parameter wherein the result of said correlation is indicative of a predisposition to developing severe lung damage.
- 31. A method according to claim 30, wherein said lung clinical parameter is the lung injury score.
- 32. A method according to claim 30 or 31, wherein said pulmonary surfactant is one or more of SP-A, SP-B, SP-C or SP-D.
- 33. A method according to claim 32, wherein said pulmonary surfactant is SP-B.
- 34. A method according to any one of claims 30 to 33, wherein said body fluid is blood.
- 35. A method according to any one of claims 1 to 34, wherein said mammal is a human.
- 36. A diagnostic kit for screening body fluid samples, comprising in compartmental form a first compartment adapted to contain an agent for detecting pulmonary surfactant and a second compartment adapted to contain reagents used for facilitating the detection by the agent in the first compartment.